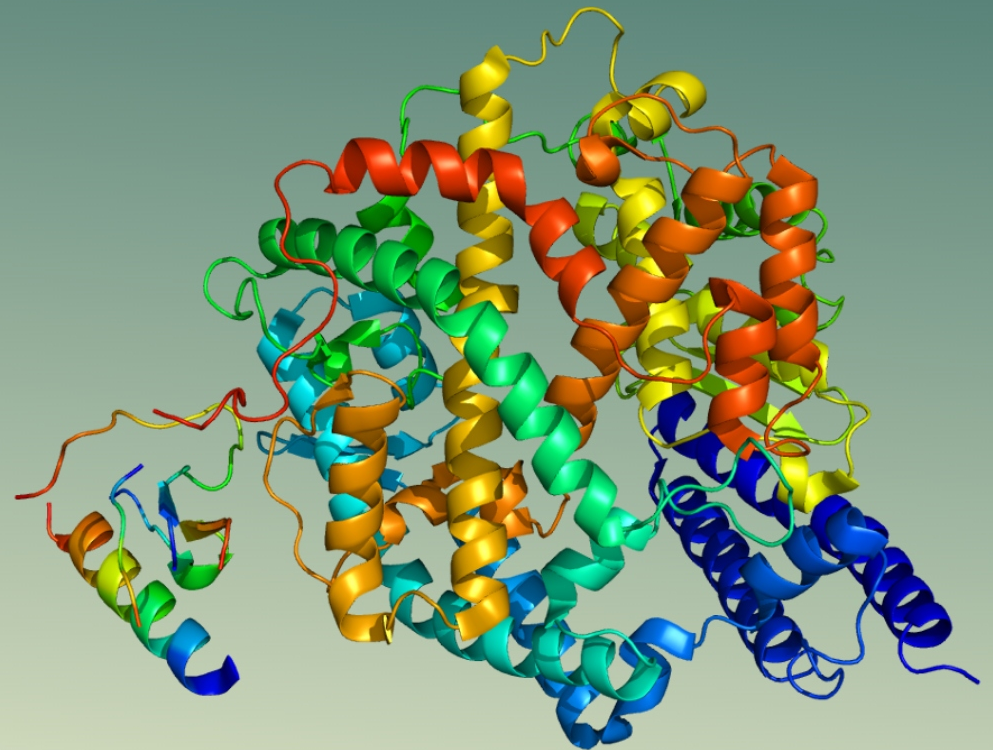


# Protease Inhibitors

Proteases are enzymes that catalyze proteolysis and can be found in all forms of life, even in viruses. The proteolysis process is realized by cleaving peptide bonds within proteins. Proteases control a variety of physiological processes such as immune response, cell cycle, cell death, wound healing, and food digestion. This fact makes proteases an important group of molecular targets for metabolic disease treatment, as well as the treatment of pathogenic diseases caused by bacteria or viruses.

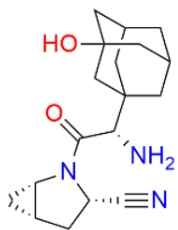
**Protease Inhibitors Library** is composed of 777 small ligands. The collection includes compounds with activity against metabolic diseases; inhibitors of ACE2 metalloprotease, which is responsible for SARS-CoV-2 cell entry; ligands with broad-scope antiviral activity; antiprotozoal compounds.

**Related terms:** *methionyl aminopeptidase, dipeptidyl peptidase, cathepsin B, monoacylglycerol lipase, MMP2, MMP8, serine protease, MMP13, angiotensin-converting enzyme*



Structure of metalloprotease ACE2, PDBID = 1R42

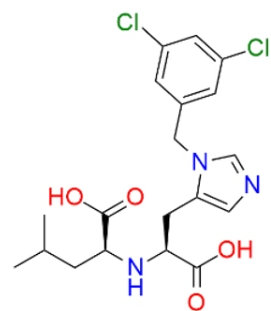
# Highlights



EBC-02059

CAS: 361442-04-8

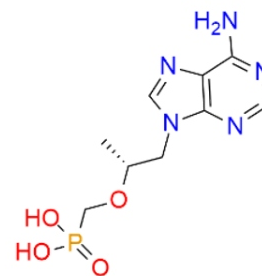
Saxagliptin, an anti-diabet  
type 2



EBC-44366

CAS: 305335-31-3

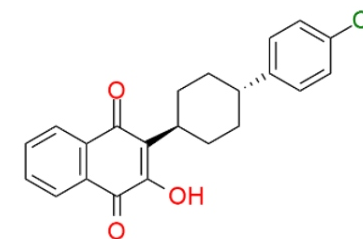
MLN-4760 ACE2 inhibitor



EBC-02044

CAS: 147127-20-6

Tenofovir, antiviral



EBC-06068

CAS: 95233-18-4

Atovaquone, antiprotozoal

# Library Composition

Name	Occurrence in the library, times
Methionyl aminopeptidase 1	16
Methionyl aminopeptidase 2	14
dipeptidyl peptidase 4	12
cathepsin B	11
Monoacylglycerol lipase	10
MMP2	9
MMP8	8
serine protease 1	7
Caspase 3	7
MMP13	7
Angiotensin-converting enzyme 2	7

calpain 2	—	6
Angiotensin-converting enzyme	—	6
beta-secretase 1	—	5
coagulation factor II, thrombin	—	5
coagulation factor X	—	5
glutaminyl-peptide cyclotransferase	—	5
elastase, neutrophil expressed	—	5
Neutral endopeptidase	—	5
MMP12	—	4
MMP14	—	4
Folate hydrolase (prostate-specific membrane antigen) 1	—	4
MMP9	—	4
cathepsin L	—	4

Caspase 6	—	3
cathepsin S	—	3
legumain	—	3
ubiquitin specific peptidase 14	—	3
ubiquitin specific peptidase 5	—	3
TRH-specific aminopeptidase	—	3
Caspase 8	—	2
Carboxypeptidase A1 (pancreatic)	—	2
CoV 3C-like (main) protease	—	2
MMP3	—	2
ADAM17	—	2
Leukotriene A4 hydrolase	—	2
proteasome 20S subunit beta 5	—	2

Arginyl aminopeptidase	—	2
ADAMTS5	—	2
renin	•	1
Caspase 1	•	1
Caspase 7	•	1
ubiquitin specific peptidase 2	•	1
Aminopeptidase A	•	1
kallikrein related peptidase 3	•	1
kallikrein B1	•	1
plasminogen activator, tissue type	•	1
Carboxypeptidase B1 (tissue)	•	1
ADAM10	•	1
coagulation factor IX	•	1



proprotein convertase subtilisin/kexin type 9	•	1
proteasome 26S subunit, non-ATPase 14	•	1
AKRIC3	•	1
Dipeptidase 1	•	1
chymotrypsin like elastase 1	•	1
proteasome 20S subunit beta 1	•	1
proteasome 20S subunit beta 8	•	1
proteasome 20S subunit beta 9	•	1
proteasome 20S subunit beta 2	•	1
kallikrein related peptidase 7	•	1
Endothelin-converting enzyme 1	•	1
cathepsin D	•	1
ubiquitin C-terminal hydrolase L1	•	1

cathepsin H

•

1

cathepsin K

•

1

Dipeptidyl-peptidase 7

•

1

dipeptidyl peptidase 8

•

1

dipeptidyl peptidase 9

•

1

Aminopeptidase N

•

1

Leucine aminopeptidase 3

•

1

complement factor B

•

1

ADAMTS4

•

1

ubiquitin C-terminal hydrolase L3

•

1

ubiquitin specific peptidase 1

•

1